



MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215
TELEPHONE: 410-764-3460 FAX: 410-358-1236

MEMORANDUM

TO: Commissioners

FROM: Eileen Fleck *E.F.*
Chief, Acute Care Policy and Planning

DATE: July 17, 2014

RE: Staff Recommendation for Final Regulations: State Health Plan for Cardiac Surgery and Percutaneous Coronary Intervention Services (COMAR 10.24.17); Analysis of Comments Received and Recommendations

Maryland Health Care Commission (MHCC) staff is requesting that the Commission adopt as final regulations a replacement COMAR 10.24.17: State Health Plan Chapter for Cardiac Surgery and Percutaneous Coronary Intervention Services (“Chapter”). The Commission adopted the Chapter as proposed permanent regulations at its April 17, 2014 public meeting. The proposed Chapter was posted for public comment on May 30, 2014. Six organizations commented during the formal comment period, which ended on June 30, 2014. Copies of these comments are attached as Appendix 1 and are also available on the MHCC web site¹.

Below is a summary of the comments received on the proposed permanent regulations, followed by Staff’s response and recommendations, including certain recommended non-substantive changes. Attached as Appendix 2 is a copy of COMAR 10.24.17, which staff recommends that the Commission adopt as final regulations.

¹ http://mhcc.dhmd.maryland.gov/shp/Pages/Comments_Received_062014.aspx

**Summary of Comments Received on Proposed COMAR 10.24.17, Staff Response to
Comments, and Recommendations**

Section .03 Issues and Policies

Anne Arundel Medical Center (AAMC) stated its belief that the statement in the proposed Chapter that access to cardiac surgery services is not a problem in Maryland may not be accurate. AAMC proposed that a final paragraph be added to the bottom of page 11 as follows:

Current geographic access to cardiac surgery services in Maryland does not preclude a finding that a particular regional or demographic disparity in access exists (such as for elderly or high-risk patients), or that new access to a high-value hospital may be advantageous. Metrics that would suggest such a finding could include quality, cost, and outcomes data as they relate to geographic access.

AAMC cited three factors as the basis for its assertion that access to cardiac surgery services may be a problem. First, AAMC noted that a recent study in *Medical Care* concluded that high-risk patients living near a hospital with coronary artery bypass graft services of acceptable quality had lower in-hospital mortality rates than high-risk patients who traveled further for cardiac surgery. Second, AAMC pointed out that the population in Maryland age 65 and over is expected to increase by 38 percent between 2010 and 2020, based on recent population projections from the Maryland Department of Planning. AAMC believes that the aging populations will result in a higher demand for cardiac surgery. Third, AAMC states that the transition to global budget reimbursement means that hospitals have an incentive to closely manage their population, and AAMC expects that local networks will be able to provide coordinated care at lower cost.

Staff Response

Staff recommends no change in response to AAMC's comments. The Certificate of Need (CON) review criteria in the proposed Chapter allow an applicant to seek to justify the establishment of cardiac surgery services in whole or in part based on inadequate access. In addition, the CON review criteria include evaluating the cost-effectiveness of a new or relocated cardiac surgery program. Paragraph .05(A)(4)(c) provides:

An applicant shall provide an analysis of how the establishment of its proposed cardiac surgery program will alter the effectiveness of cardiac surgery services for cardiac surgery patients in its proposed service area, quantifying the change in effectiveness to the extent possible. The analysis of service effectiveness shall include, but need not be limited to, the quality of care, care outcomes, and access to and availability of cardiac surgery services.

Section .04 Commission Program Policies

.04A Consideration of New Programs

AAMC suggested that .04(A)(1)(e) should include more information regarding the timing of the review schedule in order to give guidance to prospective applicants and keep the scheduling rhythm for acute care projects consistent. AAMC also noted that its suggestion would be consistent with the Commission's practice with respect to the addition of new services. AAMC suggested that language be added stating that "[as] with the introduction of new services or other specialized health care services, such review schedule will generally coincide with the review schedule for acute care hospital projects.

Staff Response

Staff recommends no change in response to AAMC's comment. Commission staff concludes that it is sufficient to publish a schedule once new regulations have become final. Staff notes that other SHP chapters do not address the schedule of reviews in the level of detail proposed by AAMC, and no problems have resulted from this approach.

.04 B. Closure of Programs

University of Maryland Medical System (UMMS) stated that the language in .04(B)(1)(a)(iv) should be clarified to ensure that a hospital has an opportunity to address specific issues before closure occurs. UMMS proposed a specific change to one of the four listed bases for considering closure of a cardiac surgery program. The proposed regulation, at Section .04(B)(1) provides:

(a) Prior to issuance of a Certificate of Ongoing Performance, the closure of a cardiac surgery program that is in existence as of the effective date of this chapter will be evaluated by the Commission and a determination concerning program closure will be made under the following circumstances:

- (i) A cardiac surgery program achieves a one-star composite rating for CABG using the rating scale developed by STS-ACSD for four consecutive rating cycles; or*
- (ii) A cardiac surgery program records a case volume of less than 100 cardiac surgery cases for two consecutive years; or*
- (iii) A cardiac surgery program fails to comply with the quality or performance standards required for a Certificate of Ongoing Performance; and*
- (iv) A cardiac surgery program has been given an opportunity to address the deficiencies identified by the Commission through an approved plan of correction and has failed to adequately correct the deficiencies.*

UMMS proposes changing subparagraph (a)(iv) above to read as follows:

- (iv) A cardiac surgery program has been given an opportunity to address deficiencies identified pursuant to subsection B(1)(i)*

through (iii) above, following a focused review as described in subsection .07B(2), submit a plan of correction which addresses those deficiencies and the hospital has failed to adequately correct those deficiencies.

Staff Response

Staff recommends no change in response to UMMS's comment. Staff concludes that the language in the proposed regulation ensures that a hospital will have an opportunity to address deficiencies through a plan of correction before closure. In addition, the changes suggested by UMMS would severely limit the circumstances under which a program could be closed because of the limited number of performance measures included in the regulation. For example, if the proposed change suggested by UMMS were adopted by MHCC, a hospital with a high mortality or morbidity rate that fails to improve on these patient outcomes, despite developing and implementing a plan of correction could not be required to voluntarily relinquish its CON. Staff believes that the proposed change would force MHCC to inappropriately rely on the STS star rating system in considering program closure without providing MHCC with the ability to independently consider high and persistent levels of mortality and morbidity in such a decision. Under the proposed regulation, a focused review is triggered for a cardiac surgery program that has a relatively high risk-adjusted mortality rate, independent of the program's recent history of star ratings. If such a focused review by a qualified auditing team leads to findings that affirm deficiencies in patient care, but the program fails to improve its morbidity or mortality rates within a reasonable period of time, MHCC should have the ability to request program closure. In addition, if the proposed changes suggested by UMMS were adopted by MHCC, if a hospital's quality assurance program is identified as deficient because it failed to identify serious problems, and the quality assurance program continues to be deficient even after a plan of correction is developed and implemented, the program could not be closed based on the failure of its quality assurance program.

Section .05 Certificate of Need Review Standards for Cardiac Surgery Programs

.05A(2) Impact

UMMS commented that, because cardiac services are inter-related and may be inter-dependent, an applicant should be required to demonstrate that other providers of cardiac services, rather than just providers of cardiac surgery, will not be negatively affected. UMMS recommended changing the reference to cardiac surgery programs in .05A(2)(a) and the reference to cardiac surgery services in .05A(2)(b)(i).

LifeBridge Health stated that consideration should be given to the impact of cases directed to hospitals as a result of the relocation of a cardiac surgery program, not just the impact on hospitals as a result of cases directed away as a result of a relocated cardiac surgery program. LifeBridge Health believes that, because most hospitals will be on a global budget, there could be negative financial consequences to having additional unexpected cardiac surgery cases.

Staff Response

Staff recommends no change in response to UMMS's comment. Staff concludes that it is appropriate to focus on the services directly affected by the addition of a new provider of cardiac surgery services.

Staff recommends no change in response to LifeBridge Health's comment. Commission staff concludes that while there may be a delay in making an adjustment to a hospital's global budget to account for service volume increases related to actions by another hospital, HSCRC has outlined a clear intent to adjust hospital budgets for changes in market share. If a hospital increases its volume of cardiac surgery cases and its market share, staff believes that those changes will likely be reflected in budget updates under the new payment model.

.05A(6)Need

AAMC commented that .05A(6)(c) could be interpreted to mean that an applicant will fail to demonstrate the need for a cardiac surgery program if the number of diagnostic cardiac catheterization procedures that result in referrals for surgery is less than 200 cases per year, or the number of referrals is not an essential part of the need demonstration. AAMC requested the following changes to the text, with its suggested deletions shown as strikethroughs and its suggested new language double underlined:

An applicant's need analysis for a new program shall include current information about the number of patients referred for cardiac surgery following a diagnostic cardiac catheterization at the applicant hospital and ~~address how~~ shall incorporate this information ~~supports into~~ into the applicant's demonstration that the proposed new program can generate at least 200 cardiac surgery cases per year.

Staff Response

Staff recommends no change in response to AAMC's comment. The language that was adopted as proposed by the MHCC contains changes that MHCC staff recommended in response to informal comments, including comments from AAMC. This subsection makes "in-house" identification of cardiac surgery patients a factor that an applicant will use in assessing the surgical case volume that it is likely to achieve, which is in contrast to the earlier quantitative criterion. Staff concludes that the proposed regulatory language appropriately reflects that the number of diagnostic cardiac catheterization procedures that result in referrals for cardiac surgery is a factor that should, within the context of a hospital's application to provide cardiac surgery services, support the applicant's projected cardiac surgery case volume. The standard does not require that a hospital show that there were 200 or more referrals for cardiac surgery generated from its own diagnostic cardiac catheterization volume. Requiring that the number of cardiac surgery patients a hospital identifies "in-house" be supportive of its need assessment and demand projections is a reasonable requirement because it establishes that the hospital already has developed or begun to develop a service area population base that relies on its cardiology staff for specialized cardiac services.

.05A(7) Financial Feasibility

LifeBridge Health commented that, with the new global budget system for hospitals, it is no longer relevant to look at the financial viability of cardiac surgery services.

Staff Response

Staff recommends no change in response to LifeBridge Health's comment. Commission staff concludes that a hospital's global budget is still informed by the types of services provided and the costs associated with those services, such as staff salaries, medical equipment and supplies, and overhead. It is still relevant to evaluate how various services contribute to a hospital's profitability. Staff notes that the HSCRC is still developing the specific policies it will employ to adjust budgets to account for introduction of new services.

Section .06 Certificate of Conformance Criteria

.06A(1) General Standards

Staff noted that the reference to the general standards in "COMAR 10.24.10(A)" is incorrect; the subsection number was left out. The corrected text is shown below with strikethroughs for deletions and double underlines for additions.

An applicant seeking a Certificate of Conformance to establish primary PCI services shall address and meet the general standards in COMAR 10.24.10.04(A) in its application.

.06B Elective PCI Services

LifeBridge Health commented that .06B(3) seems inconsistent with focusing on quality because a primary PCI program may be allowed to add elective PCI services without meeting the volume requirement if the program will achieve financial viability despite not meeting the volume standard. LifeBridge Health suggested that this exception should be limited to rural areas where the concerns about access to PCI services may be most prevalent or where closure of a primary PCI program would have a negative impact on patient care.

Staff Response

Staff recommends no change in response to LifeBridge Health's comment. Staff concludes that the other criteria and standards for elective PCI services in the proposed Chapter assure that the language does not permit anyone with a primary PCI program to easily justify adding elective PCI without meeting volume expectations. Staff first notes that subsection .06B(1) of the proposed Chapter requires a hospital with primary PCI services that seeks to add elective PCI services to "*demonstrate that its proposed elective PCI program is needed to preserve timely access to emergency PCI for the population to be served.*"

Subsection .06B(3), about which LifeBridge Health expresses concern, permits the Commission to waive the volume requirement in Subsection.06B(2), and provides:

(3) Financial Viability

The Commission may waive the volume requirement in subsection (2) if the applicant demonstrates that adding an elective PCI program to its existing primary PCI program at its likely projected annual case volume will permit the hospital's overall PCI services to achieve financial viability.

Only a hospital with a primary PCI program that serves a population that otherwise would not have timely access to primary PCI will be permitted to add elective PCI services without showing that it can reach the volume requirement of 200 total PCI cases (emergency and elective) by its second year of providing elective PCI services. Subsections .06B(1) and (3) show the Commission's concern that Maryland residents should have timely access to emergency PCI services, but still require a program to demonstrate that it can achieve financial viability.

Section .07 Certificates of Ongoing Performance

(A)(5) Performance Standards

UMMS noted that the references in .07A(5)(a) to .07B(5)(f), .07C(5)(e), and .07D(6)(e) refer to paragraphs in the proposed Chapter that do not exist.

Staff Response

Staff agrees with UMMS comment. The paragraphs referenced in the proposed Chapter do not exist, and the references should instead be to .07B(2)(e), .07C(2)(e), and .07D(2)(e).

B(2)(c) and (d); C(2)(d); D(2)(d) Focused Reviews

UMMS and LifeBridge Health both commented that rather than referring to "an" approved plan of correction, the reference should be to "the" approved plan of correction.

UMMS suggested that the term auditor should be defined to include the requisite qualifications and level of training, further stating that two physician auditors should be required for every review. UMMS also commented that auditors should not be associated with a hospital that is a direct competitor of the hospital being audited.

Staff Response

Staff recommends no change in response to Lifebridge Health and UMMS's comments. Staff concludes that the use of "an" is appropriate, given that there is more than one possible acceptable plan of correction that could be developed, even for a single hospital. Staff agrees that it is important that auditors be appropriately qualified and independent, but concludes that the definition of a focused review is sufficient to address UMMS's concerns regarding the independence of auditors. The definition specifies that one or more independent auditors with clinical expertise will be used to conduct focused reviews. Staff will ensure that auditors undertaking a focused review are qualified for tasks assigned; staff has added language to the definition of a focused review in section .09 to address this issue, as shown below. The added language is shown with double underlines.

Focused Review means an investigation of limited scope that is undertaken by one or more independent auditors with clinical expertise in order to determine whether a cardiac surgery or PCI program is complying with the standards included in these regulations as well as with the expectation that a hospital shall provide high quality patient care and accurately report data collected for evaluating the quality of care provided. A nurse auditor may evaluate the accuracy of data reporting; A physician auditor shall evaluate the quality of clinical care.

The revised definition of a focused review states that a physician auditor shall evaluate the quality of clinical care. However, staff concludes that requiring that all auditors be physicians is unnecessary. In some instances, such as when the accuracy of STS data is being evaluated, a nurse may be as qualified for the task.

B(3) Data Collection

LifeBridge Health, the Maryland Cardiac Surgery Quality Initiative (MCSQI), and UMMS all expressed concern that MHCC would attempt to duplicate the analysis performed by the Society of Thoracic Surgeons (STS) for hospitals participating in its adult cardiac surgery database (STS-ACSD). These organizations expect that MHCC's analyses of the data would be redundant, time-consuming, and expensive. MCSQI also emphasized that the calculations performed by STS are complex, and there would be significant differences between the STS-ACSD reports and any calculations that MHCC would perform on the patient-level data. Furthermore, MCSQI commented that it would question the potential validity of MHCC's analysis of patient-level STS-ACSD data. Washington Adventist Hospital (WAH) also commented that MHCC should rely on the STS-ACSD in its evaluation of cardiac surgery programs. MCSQI proposed, as a compromise alternative, that the STS-ACSD individual hospital reports be used for a period of one to three years, after which the issue could be revisited.

Staff Response

Staff recommends no changes in response to the comments regarding MHCC staff's use of the STS-ACSD patient level data. Although STS performs some audits, it is possible that years could go by without any Maryland hospital being audited given the large number of facilities participating in the STS-ACSD. MHCC plans to audit the data more frequently than STS. Staff also notes that if there is an issue with cases not being reported or information being reported inaccurately, MHCC access to the raw data will make it possible to more readily identify these issues through ongoing data collection and auditing.

MHCC staff will not have access to the comparative information in reports unless MHCC pays STS for it. Consequently, it will be more efficient for MHCC to create comparative information with the raw data, instead of flipping through many pages of reports and performing data entry, which is a slower, more error-prone process than manipulating the raw data. For many data fields, MHCC staff will be checking frequencies and number of missing values, which is included in hospitals' STS reports. Such calculations are not complex, which should minimize

or eliminate discrepancies with STS reports. For information that requires risk adjustment in order to interpret accurately, such as mortality rates, complications, or unusual lengths of stay, MHCC staff will rely on STS for the calculation. MHCC's primary focus in the first few years of collecting the STS raw data will be evaluating the accuracy of the information submitted, which is essential to ensuring a level playing field for hospitals. This is not redundant with the process of STS. MHCC's experience with the ACC-NCDR data is that sometimes hospitals fail to submit records and may not include information in some fields that MHCC regards as essential. MHCC expects that similar issues could arise with the STS data.

(C)(4) Quality

LifeBridge Health recommended that, before a requirement of semi-annual external review is included in the regulation, it should be considered by the Clinical Advisory Group. LifeBridge Health commented that semi-annual external review is unduly burdensome and expensive if it will not clearly improve the quality of patient care.

Staff Response

Staff recommends no change in response to LifeBridge Health's comment. Staff previously received comments from the Maryland Chapter of the American College of Cardiology and others advocating for quarterly external review, which led staff to recommend and the Commission to adopt semi-annual review in the proposed Chapter. Staff also notes that the total number of cases to be reviewed has not changed. It is only the frequency of the external reviews. Staff believes that semi-annual external review is not unduly burdensome.

C(6) and D(7) Physician Resources

UMMS stated its belief that, if a physician fails to perform the requisite number of procedures, then there should be an opportunity to develop a plan of correction. LifeBridge Health and UMMS also commented that it is not consistent to say that a hospital *shall* develop a plan of correction when deficiencies are identified through a focused review, and then to state in sections .07C(6) and .07D(7) that a hospital *may* be required to develop a plan of correction based on the results of evaluating all of an interventionalist's cases when s/he falls below the volume threshold of 50 cases annually over a two-year period.

Staff Response

Staff recommends no change in response to LifeBridge Health's and UMMS's comments. Staff notes that the Commission regulates at the facility-level, and therefore, it is the hospital's responsibility to evaluate individual physicians and address any concerns identified. If an interventionalist falls short of the volume standard for reasons other than a leave of absence, as provided in the Chapter, the physician must become compliant with the standard in order to resume performing procedures at a hospital without cardiac surgery on-site. Staff concludes that it is appropriate for the regulations to provide that a focused review "may" be required in the circumstances described in .07C(6) and .07D(7) since the results of a review of a physician's cases may be favorable or unfavorable for the physician and may or may not implicate the hospital.

Section .08 Utilization Projection Methodology for Cardiac Surgery

.08C Patient Migration

AAMC suggested that .08C(2) should be deleted because it will likely make an applicant's utilization projections less accurate. AAMC noted that, when a new program opens, it is likely to affect market share and patient migration patterns. These changes will not be captured if there is an arbitrary assumption that the pattern will not change for a year after a program opens.

Staff Response

Staff recommends no change in response to AAMC's comment. While Staff agrees that the market share of cardiac surgery programs will change when a new program is established, Staff disagrees that the delay in adjusting the utilization projection methodology is an improvement over the alternative. The alternative potentially would allow data for just a few months of operation at a new program to determine the assumptions made about market share years later. Staff disagrees that the proposed utilization projection could make an applicant's utilization projections less accurate. An applicant should base its utilization projections on the best available information, with all assumptions explicitly stated. An applicant must address the utilization projection, but is not precluded from presenting its own utilization projections. In addition, the impact on existing programs will be considered during a CON review, thus providing another opportunity to consider the market share of programs.

.08(G) Projection of Cardiac Surgery Utilization by the Adult Population

AAMC expressed concern that the predicted growth rate in cardiac surgery will be inaccurate given the methodology chosen. AAMC commented that changes in the growth rate in recent years should be weighted more heavily than changes six years ago. AAMC recommended the following changes to .08G(1), with AAMC's suggested new language double underlined and deletions shown in strikethroughs:

(a) Calculate the use rate of cardiac surgery for the resident of each health planning region, for ~~each of the six~~ fourth most recent ~~years~~ year and the most recent year of available data for each adult age group, by dividing the total number of surgery cases performed for each adult age group, in each health planning region, by the corresponding population for each health planning region.

(b) Calculate the average annual percentage change in cardiac surgery use rates between the fourth most recent year and the most recent year for each adult age group, in each health planning region, by ~~summing the five percentage changes in use rates calculated for the six year time period and dividing the sum by five.~~ calculating the third root of a fraction, the numerator of which is the use rate in base year, and the denominator of which is the use rate in the fourth most recent year of available data for each adult age group.

Staff Response

Staff recommends no change in response to AAMC's comment. AAMC did not present evidence that weighting a change in the cardiac surgery use rate in recent years more heavily than changes several years ago results in more accurate estimates of the future use rate for cardiac surgery. MHCC notes that if the most recent years of data on cardiac surgery case volume typically signal a change in the volume trend for cardiac surgery cases for an age group and region, then AAMC's approach would be expected to be more accurate. However, if there are typically fluctuations up and down from year-to-year in cardiac surgery case volume for an age group and region, then MHCC's approach will be more accurate. Based on MHCC's analysis of historic trends by age group and health planning region for the period 2000 to 2013, MHCC concludes that its approach in the long-run will be more accurate.

MHCC staff also notes that the utilization projection for cardiac surgery must be addressed by an applicant, but it is not used to set absolute minimum and maximum cardiac surgery case volume projections that dictate MHCC's actions on a CON for new or relocated cardiac surgery services. In addition, the proposed regulations allow an applicant seeking to establish cardiac surgery services the opportunity to address any perceived deficiencies with the utilization projection as part of the CON review process. An applicant may present its analyses of its own service area and regional market characteristics to explain why the utilization forecast for the region where its project will be located fails to account for the region's likely projected case volume.

Section .09 Definitions

AAMC commented that five additional procedure codes should be included in the definition of cardiac surgery: 35.96; 37.35; 37.36; 39.65; and 39.66. AAMC did not provide a written explanation for this proposed change but has discussed these changes with MHCC staff.

MedStar Health also commented on the procedure codes included in the definition for cardiac surgery. MedStar Health expressed concern about the addition of six codes: 35.05; 35.06; 35.08; 35.09; 35.97; and 37.37. MedStar Health noted that defining these procedures as surgical rather than interventional is not straight-forward and recommended that the list of codes in the current regulation be maintained and input sought through the standing advisory committee for cardiac services referenced in the proposed regulation.

Staff Response

Staff recommends no change in response to AAMC's comments. Staff spoke with two physicians who stated that the procedure corresponding to ICD-9 code 39.66 could be performed in a cardiac catheterization laboratory. This code also showed up at a hospital without cardiac surgery on-site in CY 2012. Therefore, this code is not appropriate for inclusion in the definition of cardiac surgery. The ICD-9 code 37.35 is new and shows up very rarely (only two cases were recorded in the Maryland hospital discharge data base in CY 2012 and one case in CY 2013), so including or excluding the code will have little impact on the cardiac utilization projection. Staff has received conflicting information regarding whether to include the codes 35.96, 39.65, and 37.36. Staff agrees that it would be appropriate to examine the list of cardiac surgery codes

included through the standing advisory committee for cardiac services before making additional changes to the list. With regard to MedStar Health's comments, Staff concludes that some changes to the list of cardiac surgery codes in the proposed regulation are reasonable. Commission staff notes that many of the codes that MedStar Health expressed concern about adding correspond to new procedures that show up rarely at Maryland's hospitals; collectively these codes are included in three percent of records with cardiac surgery codes in the Maryland hospital discharge data base in CY 2013. Therefore, staff concludes that the inclusion or exclusion of these codes will have very little impact on the current cardiac utilization projections and that they are appropriate for consideration by the Commission's standing advisory committee for cardiac services. The Committee's recommendations should then inform an update to the definition of cardiac surgery. Staff also notes that the definition for cardiac surgery includes an invalid procedure code, 36.20. This code should be deleted.

Staff's proposed non-substantive changes to the definition for cardiac surgery are shown below with strikethroughs for deletions and double underlines for additions.

Cardiac Surgery means surgery on the heart or major blood vessels of the heart, including both open and closed heart surgery, identified by the following International Classification of Disease (9th Revision) procedure codes: 35.00-35.09; 35.10-35.51; 35.53-35.95; 35.97-35.99; 36.03; 36.10-36.19~~20~~; 36.31; 36.91-36.99; 37.10-37.11; 37.32- 37.33; and 37.37; or the corresponding International Classification of Diseases (10th Revision) procedure codes. The list of procedure codes will be updated as necessary through notification in the Maryland Register and on the Maryland Health Care Commission web site.

Additional Non-Substantive Changes

Footnotes

On page 4, the first journal article in the footnote should refer to the *Journal of the American Medical Association* rather than the *New England Journal of Medicine*. The volume number and pages correspond to the correct source. However, in order to be consistent in formatting for citations, the format of the volume information needs to be changed for this article and others cited. The format of the other sources in the footnotes on pages 4, 9, and 10 also need to be adjusted for consistency with the MLA citation format.

Section .08I Mathematical Formulas

The term "j", which refers to the age groups used in calculations for the utilization forecast has both a 65-74 age group and an age 75 and older group. There should only be a 65 and over group to be consistent with the text in the regulation describing the utilization forecast. The change is shown below with strikethroughs for deletions and double underlines for added text.

j Age groups (0-14(*pediatric*); 15-44, 45-64, ~~65-74~~; 75 and older)